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Indiana Public Retirement System

Public Employees' Retirement Fund

Actuarial Valuation as of
June 30, 2011



January 31, 2012

Board of Trustees
Indiana Public Retirement System
1 North Capitol, Suite 001
Indianapolis, IN 46204

Re: Certification of the Actuarial Valuations of the Indiana Public Retirement System as of June 30, 2011

Dear Board of Trustees:

Actuarial valuations are performed annually for the Indiana Public Retirement System ("INPRS") defined benefit pension plans ("Plans"). The results of the latest actuarial valuations, which were prepared as of June 30, 2011, are presented in individual valuation reports for each fund and were prepared pursuant to the engagement letter between INPRS and PricewaterhouseCoopers LLP ("PwC"), dated June 7, 2010. The reports are intended to provide the Board of Trustees ("Board") with information on the funded status of the Plans, development of the contribution rates, and certain financial statement disclosure information.

Under Indiana statutes, employer contribution rates are adopted annually for each Plan by the Board. These rates are actuarially determined based on the Board's funding policy and adopted actuarial assumptions. Contribution rates determined by the actuarial valuation become effective either twelve or eighteen months after the valuation date, depending on the applicable employer. For example, the rates determined by the June 30, 2011 actuarial valuation and adopted by the Board will become effective on either July 1, 2012 or January 1, 2013. If new legislation is enacted between the valuation date and the date the contribution rates become effective, the Board may adjust the recommended rates before adopting them, in order to reflect this new legislation. Such adjustments are based on information supplied by the actuary.

Financing Objectives and Funding Policy

In setting the contribution rates, the Board's principal objectives have been:

- To set contribution rates such that the unfunded actuarial accrued liability ("UAAL") will be amortized over a 30-year period.
- To set contribution rates such that they remain relatively level over time.

To accomplish this, the Board's funding policy requires that the employer contribution rate be equal to the sum of the employer normal cost rate (which pays the current year cost) and an amortization rate which results in the amortization of the UAAL in equal installments.

At the December 16, 2011 meeting, the Board resolved to discontinue the use of contribution rate smoothing rules previously employed for the Public Employees' Retirement Fund, the State Excise Police, Gaming Agent, Gaming Control Officer, and Conservation Enforcement Officers' Retirement Plan, the 1977 Police Officers' and Firefighters' Pension and Disability Fund, and the Prosecuting Attorneys' Retirement Fund. For political subdivisions participating in the Public Employees' Retirement Fund, a systematic method for migrating all employers to a single contribution rate was adopted.

No membership growth is anticipated in setting the contribution rate. This is consistent with GASB #25, which prohibits anticipating membership growth in determining the minimum Annual Required Contribution ("ARC").

Progress Toward Realization of Financing Objectives

The funded ratio (the ratio of the actuarial value of assets to the actuarial accrued liability) is a standard measure of a Plan's funded status. In the absence of benefit improvements, it should increase over time, until it reaches 100%. The combined funded ratio for all Plans decreased by 2.7% from the preceding year to 83.4%, primarily due to the delayed recognition of asset losses from 2008 - 2009 in the Actuarial Value of Assets, partially offset by asset gains since such time and changes to some of the actuarial assumptions pursuant to the experience study.



Benefit Provisions

The benefit provisions reflected in the valuation reports are those which were in effect at June 30, 2011, as set forth in the related Indiana statutes. None of the Plans had any material changes in benefit provisions since the 2010 valuation.

Assets and Member Data

The valuations were based on asset values of the trust funds and member census data as of June 30, 2011. All asset and member data was provided by INPRS. While certain checks for reasonableness were performed, the data was used unaudited. The accuracy of the results presented in the reports is dependent upon the accuracy and completeness of the underlying asset and census information.

Actuarial Assumptions and Methods

The actuarial assumptions used in the June 30, 2011 valuations were adopted by the Board pursuant to the Experience Studies of September 2011, which reflect the experience period from July 1, 2005 and June 30, 2010. The actuarial assumptions for interest rate, COLA, and amortization method were approved by the Board in September 2010 for use in the 2010 valuations. The actuarial assumptions and methods are summarized in the Actuarial Assumptions and Methods section of each valuation report. The actuarial assumptions and methods are reasonable for the purposes of the valuation reports and comply with the parameters set forth in Statements No. 25 and No. 27 of the Governmental Accounting Standards Board ("GASB"). Different assumptions and methods may be reasonable for other purposes. As such, the results presented in the valuation reports should only be relied upon for the intended purpose.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of each Plan administered by INPRS as of June 30, 2011.

This report contains the required accounting information to be included in the Comprehensive Annual Financial Report. This information has been prepared in accordance with our understanding of Governmental Accounting Standards No. 25 and No. 27 (as amended by No. 50).

To the best of our knowledge this actuarial statement is complete and accurate and has been prepared in accordance with generally accepted actuarial principles and practice and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Indiana state law. The undersigned actuaries are members of the Society of Actuaries and other professional organizations, including the American Academy of Actuaries, and meet the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States relating to pension plans. There is no relationship between PwC and INPRS that may impair our objectivity.

This document was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law. This document has been prepared pursuant to an engagement letter between INPRS and PwC, and is intended solely for the use and benefits of INPRS and not for reliance by any other person.

Respectfully submitted,

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SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT

This report presents the results of the actuarial valuation of the Public Employees' Retirement Fund ("PERF") and has been prepared to present the current funded status of the Plan, contribution requirements for fiscal year 2013 (July 1, 2012 through June 30, 2013 for State and January 1, 2013 through December 31, 2013 for Political Subdivisions), and certain financial statement disclosure information. The valuation was performed using census data for plan members as of as of June 30, 2011 provided by INPRS, asset information as of June 30, 2011 provided by INPRS, the actuarial assumptions and methods approved by the Board and summarized in Section V, and the plan provisions effective June 30, 2011 as summarized in Section VI.

Contribution Rates

The State employer contribution rate increased from 8.6% to 9.7%. This contribution rate is equal to the current year True Rate, rounded up to the next tenth of a percent. The contribution rate determined by the June 30, 2011 valuation becomes effective on July 1, 2012. Therefore, the actual dollar amount of employer cost will depend on the actual payroll during fiscal year 2013.

The Political Subdivisions employer contribution rate, after aggregating over all participating Political Subdivisions, increased from 8.8% to 9.7%. The contribution rate for each Political Subdivision is equal to the prior year Actual Rate increased by a maximum of 1.5% until the Political Subdivision reaches the Composite Rate (10.0% as of the June 30, 2011 valuation). The Composite Rate is the aggregate True Rate for all Political Subdivisions. This approach will fully fund the Annual Required Contribution once all Political Subdivisions are contributing the Composite Rate. The Political Subdivisions contribution rates determined by the June 30, 2011 valuation become effective on January 1, 2013. Therefore, the actual dollar amount of employer cost will depend on the actual payroll during calendar year 2013.

Employees of the State and participating Political Subdivisions contribute 3% of their compensation to an Annuity Savings Account. Employers may "pick up" the employee contributions. The accumulated balance in each member's Annuity Savings Account can be withdrawn as a lump sum upon termination or can be converted to an annuity and added to the benefit that is funded by the employer contributions upon retirement.

Funded Status

The funded status of PERF is measured by the funded ratio, which is the ratio of the assets available for benefits to a benefit liability measure for PERF. While there are several such measures that could be appropriately used, the benefit liability measure that ties most closely to PERF's funding strategy is the Actuarial Accrued Liability ("AAL").

Using the Actuarial Value of Assets ("AVA"), an asset value that smoothes the market gains and losses over four (4) years, the PERF AAL funded ratio decreased from 85.2% at June 30, 2010 to 80.5% at June 30, 2011. The decrease is primarily due to a loss on the AVA from smoothing investment losses that occurred in 2008 and 2009, partially offset by asset gains since such time and by changes to the future salary increases, termination, and retirement assumptions, which decreased the AAL.

SECTION I - EXECUTIVE SUMMARY

HIGHLIGHTS OF THE ACTUARY'S REPORT (CONTINUED)

Investment Experience

On a Market Value basis, from June 30, 2010 to June 30, 2011, PERF experienced an approximate investment return of 19.9%. However, on an Actuarial Value basis over the same time period, PERF experienced an approximate investment return of (1.2%). The negative investment return on the AVA can be attributed to the smoothing of prior net losses that more than offset the gain on Market Value from June 30, 2010 to June 30, 2011.

Cost-of-Living Adjustment

Cost-of-living increases for retired members have historically been granted on an "ad hoc" basis. No increase in monthly benefits was provided to retired members, disabled members, or beneficiaries at July 1, 2011. Instead a "13th check" was paid to each member in pay status during September 2011. The amount of the 13th check varied based on the years of creditable service the member had earned prior to retirement.

Changes in Actuarial Assumptions

For the June 30, 2011 valuation, the Board approved the following assumption changes:

- The future salary increases assumption changed from 4.0% per year to age-based rates ranging from 3.25% - 4.50%.
- The termination assumption rates increased to reflect recent experience and are now based on salary above or below \$20,000.
- The retirement assumption rates decreased slightly to reflect recent experience.
- The marriage assumption changed from 90% of members assumed to be married or to have a dependent beneficiary, to 75% of male members and 60% of female members assumed to be married or to have a dependent beneficiary.
- The age difference assumption changed from males assumed to be three (3) years older than their spouses and female members assumed to be three (3) years younger than their spouses, to male members assumed to be three (3) years older than their spouses and female members assumed to be two (2) years younger than their spouses.
- The ASA withdrawal assumption changed from 100% of inactive members assumed to withdraw their ASA balances immediately, to 100% of inactive non-vested members assumed to withdraw their ASA balances immediately, 50% of inactive vested members assumed to withdraw their ASA balances immediately, and 50% of inactive vested members assumed to annuitize their ASA balances upon commencement of their employer funded annuity benefit.

Changes in Plan Provisions

There have been no changes in the plan provisions since the June 30, 2010 valuation.

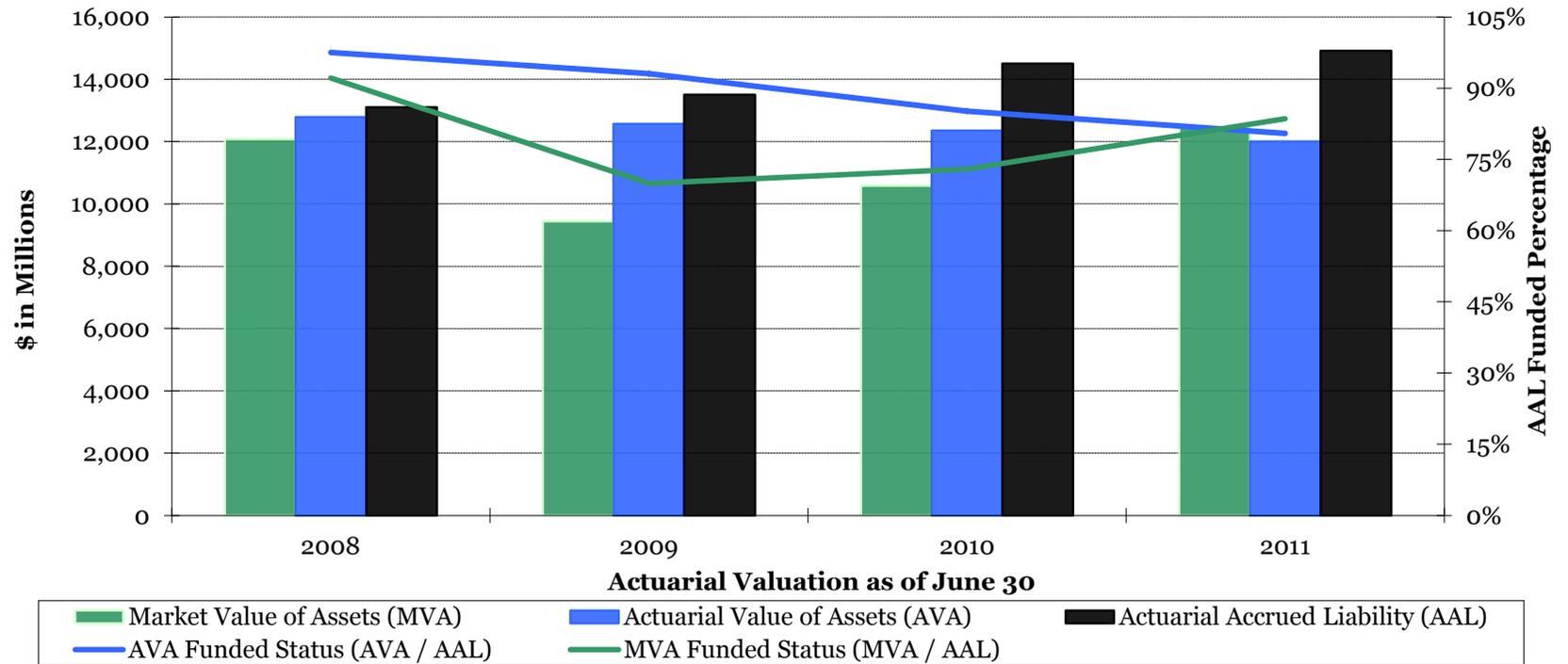
Changes in Actuarial Methods

At the December 16, 2011 meeting, the Board resolved to discontinue the use of the contribution rate smoothing rules previously in effect. Based on the June 30, 2011 valuation results, the contribution rate approved for the State is equal to the True Rate for the State, rounded up to the next tenth of a percent. For Political Subdivisions, the Board approved to begin migration to a single rate for all employers. For Political Subdivisions contributing less than the Composite Rate (aggregate True Rate equal to 10% for fiscal year 2013) during fiscal year 2012, the contribution rate will increase no more than 1.5%, to a maximum of the Composite Rate during fiscal 2013. For Political Subdivisions contributing more than or equal to the Composite Rate during fiscal year 2012, will contribute the Composite Rate during fiscal 2013.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY

Total PERF – 4 Year History of Funded Status ¹



Actuarial Valuation as of June 30:	2008	2009	2010	2011
Actuarial Accrued Liability (AAL)	\$13,103.2	\$13,506.3	\$14,506.1	\$14,913.1
Actuarial Value of Assets (AVA)	12,780.1	12,569.3	12,357.2	12,000.6
Market Value of Assets (MVA)	12,073.5	9,442.3	10,581.3	12,461.4
Unfunded Liability (AAL - AVA)	323.1	937.0	2,148.9	2,912.5
AVA Funded Status (AVA / AAL)	97.5%	93.1%	85.2%	80.5%
MVA Funded Status (MVA / AAL)	92.1%	69.9%	72.9%	83.6%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Total PERF – Summary of Valuation Results¹

	<u>June 30, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Development of True Rate ²				
Normal Cost (Beginning of Year)	\$ 279,655,104	\$ 298,159,870	\$ 320,524,189	\$ 253,006,701
Amortization of Unfunded Actuarial Accrued Liability	<u>25,269,003</u>	<u>72,839,046</u>	<u>163,318,289</u>	<u>222,668,943</u>
Total Contribution Amount	\$ 304,924,107	\$ 370,998,916	\$ 483,842,478	\$ 475,675,644
True Contribution Rate	6.9%	7.8%	9.9%	9.9%
Approved Funding Rate ²				
Approved Contribution Rate ³	6.8%	7.3%	8.7%	9.7%
Estimated Contribution Amount ⁴	\$ 310,571,401	\$ 360,183,300	\$ 428,086,297	\$ 493,580,705

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary. Valuation results prior to June 30, 2010 included an interest adjustment to the middle of the year because the payroll used for computing contribution rates was not discounted to the beginning of the year.

² The rates and contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

³ The Approved Contribution Rate shown is the aggregate rate for the State and Political Subdivisions. The contribution rates determined by the June 30, 2011 valuation become effective July 1, 2012 for the State rate and January 1, 2013 for the Political Subdivisions' rates. Approved Contribution Rates before June 30, 2011 were based on smoothing rules that were repealed by the Board in December 2011.

⁴ Estimated Contribution Amounts prior to June 30, 2011 are based on actual payroll as of the valuation date. Estimated Contribution Amounts for June 30, 2011 are based on projected payroll to the date contribution rates go into effect. The actual dollar amount of employer cost will depend on the actual payroll during fiscal year 2013 for the State and calendar year 2013 for the Political Subdivisions.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

State – Summary of Valuation Results ¹

	<u>June 30, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Development of True Rate ²				
Normal Cost (Beginning of Year)	\$ 98,916,617	\$ 103,491,300	\$ 110,142,867	\$ 73,614,164
Amortization of Unfunded Actuarial Accrued Liability	<u>3,417,230</u>	<u>24,800,374</u>	<u>66,147,093</u>	<u>84,263,994</u>
Total Contribution Amount	\$ 102,333,847	\$ 128,291,674	\$ 176,289,960	\$ 157,878,158
True Contribution Rate	6.4%	7.6%	10.2%	9.6%
Approved Funding Rate ²				
Approved Contribution Rate ³	6.5%	7.0%	8.6%	9.7%
Estimated Contribution Amount ⁴	\$ 107,981,141	\$ 118,199,909	\$ 148,821,254	\$ 165,613,260

Political Subdivisions – Summary of Valuation Results ¹

	<u>June 30, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Development of True Rate ²				
Normal Cost (Beginning of Year)	\$ 180,738,487	\$ 194,668,570	\$ 210,381,322	\$ 179,392,537
Amortization of Unfunded Actuarial Accrued Liability	<u>21,851,773</u>	<u>48,038,672</u>	<u>97,171,196</u>	<u>138,404,949</u>
Total Contribution Amount	\$ 202,590,260	\$ 242,707,242	\$ 307,552,518	\$ 317,797,486
True Contribution Rate	7.1%	7.9%	9.7%	10.0%
Approved Funding Rate ²				
Approved Contribution Rate ³	7.1%	7.9%	8.8%	9.7%
Estimated Contribution Amount ⁴	\$ 202,590,260	\$ 241,983,391	\$ 279,265,043	\$ 327,967,445

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary. Valuation results prior to June 30, 2010 included an interest adjustment to the middle of the year because the payroll used for computing contribution rates was not discounted to the beginning of the year.

² The rates and contribution amounts shown were developed on a funding basis only and do not reflect accounting requirements.

³ The Approved Contribution Rates shown is the aggregate rate for Political Subdivisions. The contribution rates determined by the June 30, 2011 valuation become effective July 1, 2012 for the State rate and January 1, 2013 for the Political Subdivisions' rates. Approved Contribution Rates before June 30, 2011 were based on smoothing rules that were repealed by the Board in December 2011.

⁴ Estimated Contribution Amounts prior to June 30, 2011 are based on actual payroll as of the valuation date. Estimated Contribution Amounts for June 30, 2011 are based on projected payroll to the date contribution rates go into effect. The actual dollar amount of employer cost will depend on the actual payroll during fiscal year 2013 for the State and calendar year 2013 for the Political Subdivisions.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Total PERF – Summary of Valuation Results (Continued) ¹

	<u>June 30, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Census Information				
Active				
Number				
State	45,713	46,749	48,220	45,912
Political Subdivisions	<u>94,433</u>	<u>101,043</u>	<u>101,657</u>	<u>102,021</u>
Total	140,146	147,792	149,877	147,933
Average Age	47.8	47.3	47.5	47.6
Average Years of Service	11.6	10.9	11.2	11.4
Covered Payroll of Actives				
State	1,661,248,319	1,749,780,803	1,730,479,696	1,641,685,770
Political Subdivisions	<u>2,939,105,575</u>	<u>3,181,642,137</u>	<u>3,165,532,884</u>	<u>3,177,087,910</u>
Total	\$ 4,600,353,894	\$ 4,931,422,940	\$ 4,896,012,580	\$ 4,818,773,680
Inactive - Vested				
Number	15,450	10,670	14,759	20,933
Average Age			53.9	52.7
Average Years of Service			15.1	11.8
Inactive - Non-Vested				
Number			88,234	71,806
Retiree/Beneficiary/Disabled				
Number	62,424	65,099	67,166	70,380
Average Age			72.6	72.5
Annual Benefits Payable				
Pension			422,825,882	455,230,274
ASA Annuities			<u>75,373,430</u>	<u>84,516,826</u>
Total	\$ 436,748,994	\$ 477,552,507	\$ 498,199,312	\$ 539,747,100

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION I - EXECUTIVE SUMMARY

HISTORICAL SUMMARY (CONTINUED)

Total PERF – Summary of Valuation Results (Continued) ¹

	<u>June 30, 2008</u>	<u>June 30, 2009</u>	<u>June 30, 2010</u>	<u>June 30, 2011</u>
Actuarial Accrued Liability (AAL)				
ASA Account Balance	\$ 2,694,331,410	\$ 2,669,318,240	\$ 2,780,570,388	\$ 2,805,023,137
ASA Annuities - Retiree/Beneficiary/Disabled			710,683,223	801,369,029
Pension - Retiree/Beneficiary/Disabled	4,227,365,567	4,611,256,619	4,220,908,907	4,569,417,231
Pension - Active and Inactive				
State	2,513,791,279	2,443,039,325	2,678,030,588	2,538,861,413
Political Subdivisions	3,667,732,921	3,782,666,167	4,115,859,095	4,198,476,483
Total	\$ 6,181,524,200	\$ 6,225,705,492	\$ 6,793,889,683	\$ 6,737,337,896
Total	\$ 13,103,221,177	\$ 13,506,280,351	\$ 14,506,052,201	\$ 14,913,147,293
Actuarial Value of Assets (AVA)				
ASA Account Balance	\$ 2,694,331,410	\$ 2,669,318,240	\$ 2,780,570,388	\$ 2,805,023,137
ASA Annuities - Retiree/Beneficiary/Disabled			710,683,223	801,369,029
Pension - Retiree/Beneficiary/Disabled	4,227,365,567	4,611,256,619	4,220,908,907	4,569,417,231
Pension - Active and Inactive	5,858,419,075	5,288,761,052	4,645,036,496	3,824,776,913
Total	\$ 12,780,116,052	\$ 12,569,335,911	\$ 12,357,199,014	\$ 12,000,586,310
Market Value of Assets (MVA)				
ASA Account Balance	\$ 2,694,331,410	\$ 2,669,318,240	\$ 2,780,570,388	\$ 2,805,023,137
ASA Annuities - Retiree/Beneficiary/Disabled			710,683,223	801,369,029
Pension - Retiree/Beneficiary/Disabled	4,227,365,567	4,611,256,619	4,220,908,907	4,569,417,231
Pension - Active and Inactive	5,151,772,961	2,161,760,681	2,869,156,895	4,285,546,512
Total	\$ 12,073,469,938	\$ 9,442,335,540	\$ 10,581,319,413	\$ 12,461,355,909
Unfunded Actuarial Accrued Liability: AAL - AVA				
ASA Account Balance	\$ -	\$ -	\$ -	\$ -
ASA Annuities - Retiree/Beneficiary/Disabled			-	-
Pension - Retiree/Beneficiary/Disabled	-	-	-	-
Pension - Active and Inactive	323,105,125	936,944,440	2,148,853,187	2,912,560,983
Total	\$ 323,105,125	\$ 936,944,440	\$ 2,148,853,187	\$ 2,912,560,983
Funded Percentage: AVA / AAL				
ASA Account Balance	100.0%	100.0%	100.0%	100.0%
ASA Annuities - Retiree/Beneficiary/Disabled			100.0%	100.0%
Pension - Retiree/Beneficiary/Disabled	100.0%	100.0%	100.0%	100.0%
Pension - Active and Inactive	94.8%	85.0%	68.4%	56.8%
Total	97.5%	93.1%	85.2%	80.5%
Summary of Assumptions				
Valuation Interest Rate	7.25%	7.25%	7.0%	7.0%
Salary Scale	4.0%	4.0%	4.0%	3.25% - 4.5%
Cost-of-Living Assumption	2.75%	1.5%	1.0%	1.0%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION II - FUNDING

FUNDING

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SECTION II - FUNDING

A. Development of Funded Status

	<u>June 30, 2010</u>	<u>June 30, 2011</u>
1. Actuarial Accrued Liability		
a. Annuity Savings Account	\$ 2,780,570,388	\$ 2,805,023,137
b. ASA Annuities	710,683,223	801,369,029
c. Retirees, Beneficiaries, and Disableds	4,220,908,907	4,569,417,231
d. Actives and Inactives	<u>6,793,889,683</u>	<u>6,737,337,896</u>
e. Total: (1)(a) + (1)(b) + (1)(c) + (1)(d)	\$ 14,506,052,201	\$ 14,913,147,293
2. Actuarial Value of Assets		
a. Annuity Savings Account	\$ 2,780,570,388	\$ 2,805,023,137
b. ASA Annuities	710,683,223	801,369,029
c. Retirees, Beneficiaries, and Disableds	4,220,908,907	4,569,417,231
d. Actives and Inactives	<u>4,645,036,496</u>	<u>3,824,776,913</u>
e. Total: (2)(a) + (2)(b) + (2)(c) + (2)(d)	\$ 12,357,199,014	\$ 12,000,586,310
3. Unfunded Actuarial Accrued Liability		
a. Annuity Savings Account: (1)(a) - (2)(a)	\$ -	\$ -
b. ASA Annuities: (1)(b) - (2)(b)	-	-
c. Retirees, Beneficiaries, and Disableds: (1)(c) - (2)(c)	-	-
d. Actives and Inactives: (1)(d) - (2)(d)	<u>2,148,853,187</u>	<u>2,912,560,983</u>
e. Total: (1)(e) - (2)(e)	\$ 2,148,853,187	\$ 2,912,560,983
4. Funded Status		
a. Annuity Savings Account: (2)(a) / (1)(a)	100.0%	100.0%
b. ASA Annuities: (2)(b) / (1)(b)	100.0%	100.0%
c. Retirees, Beneficiaries, and Disableds: (2)(c) / (1)(c)	100.0%	100.0%
d. Actives and Inactives: (2)(d) / (1)(d)	<u>68.4%</u>	<u>56.8%</u>
e. Total: (2)(e) / (1)(e)	85.2%	80.5%

SECTION II - FUNDING

B. Unfunded Actuarial Accrued Liability Reconciliation ¹

	June 30, 2010	June 30, 2011
1. Unfunded Actuarial Accrued Liability, Prior Year	\$ 936,944,440	\$ 2,148,853,187
2. Unfunded Actuarial Accrued Liability (Gain) / Loss		
a. Actuarial Value of Assets Experience	\$ 879,515,662	\$ 1,000,631,406
b. Actuarial Accrued Liability Experience	10,544,338	82,616,614
c. Additional Liability Due to Transition from Prior Actuary	87,125,871	-
d. Additional Liability Due to Changes in Actuarial Assumptions	244,914,281	(295,209,380)
e. Additional Liability Due to Changes in Plan Provisions	-	-
f. Total New Amortization Bases:	\$ 1,222,100,152	\$ 788,038,640
(2)(a) + (2)(b) + (2)(c) + 2(d) + (2)(e)		
g. Amortization of Existing Bases	(10,191,405)	(24,330,844)
h. Change in Unfunded Actuarial Accrued Liability:	\$ 1,211,908,747	\$ 763,707,796
(2)(f) + (2)(g)		
3. Unfunded Actuarial Accrued Liability, Current Year: (1) + (2)(h)	\$ 2,148,853,187	\$ 2,912,560,983

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION II - FUNDING

C. Actuarial Accrued Liability Reconciliation

1.	June 30, 2010 Actuarial Accrued Liability	\$	14,506,052,201	
2.	Normal Cost		320,524,189	
3.	Actual Benefit Payments		713,716,597	
4.	Interest of 7.00% on (1) + (2) - (3)/2		1,012,880,266	
5.	Expected June 30, 2011 Actuarial Accrued Liability: (1) + (2) - (3) + (4)	\$	15,125,740,059	
			<u>Dollar Change</u>	<u>Percent Change</u>
			<u>in Liability</u>	<u>in Liability</u>
6.	(Gain)/Loss Components			
a.	Census	\$	82,616,614	0.5%
b.	Assumption Changes		<u>(295,209,380)</u>	<u>(2.0%)</u>
c.	Total: (6)(a) + (6)(b)	\$	(212,592,766)	(1.4%)
7.	Actual June 30, 2011 Actuarial Accrued Liability: (5) + (6)(c)	\$	14,913,147,293	

SECTION II - FUNDING

D. Reconciliation of Market Value of Assets

	<u>June 30, 2010</u>	<u>June 30, 2011</u>
1. Market Value of Assets, Prior June 30	\$ 9,442,335,540	\$ 10,581,319,413
2. Receipts		
a. Employer Contributions	\$ 331,089,590	\$ 342,778,706
b. Employee Contributions	158,089,692	156,027,588
c. Investment Income and Dividends Net of Fees	1,290,841,251	2,105,673,340
d. Security Lending Income Net of Fees	6,701,978	6,417,025
e. Net Transfers In	2,339,098	5,299,445
f. Miscellaneous Income	61,417	18,134
g. Total Receipts: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f)	\$ 1,789,123,026	\$ 2,616,214,238
3. Disbursements		
a. Benefits Paid During the Year	\$ 579,710,876	\$ 638,460,412
b. Refund of Contributions and Interest	39,632,358	65,178,251
c. Administrative Expenses	24,958,702	22,461,145
d. Net Transfers Out	5,837,217	10,077,934
e. Miscellaneous Disbursements	-	-
f. Total Disbursements: (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e)	\$ 650,139,153	\$ 736,177,742
4. Market Value of Assets, Current June 30: (1) + (2)(g) - (3)(f)	\$ 10,581,319,413	\$ 12,461,355,909
5. Market Value of Assets Approximate Annual Rate of Investment Return	13.5%	19.9%

SECTION II - FUNDING

E. Reconciliation of Actuarial Value of Assets

1.	Market Value of Assets, June 30, 2010		\$	10,581,319,413
2.	Market Value of Assets, June 30, 2011			12,461,355,909
3.	Expected Earnings/Expenses			
a.	Expected Investment Earnings at 7.00% on June 30, 2010 Market Value			740,692,359
b.	Receipts and Expected Investment Earnings at 7.00%			521,768,209
c.	Disbursements and Expected Investment Earnings at 7.00%			738,696,678
4.	Expected Assets, June 30, 2011: (1) + (3)(a) + (3)(b) - (3)(c)		\$	11,105,083,303
5.	2010-2011 Gain/(Loss): (2) - (4)			1,356,272,606
6.	Smoothing of Gain/(Loss)			
	<u>Year</u>	<u>Gain/(Loss)</u>	<u>% Unrecognized</u>	
a.	2010-2011	\$ 1,356,272,606	75%	1,017,204,455
b.	2009-2010	\$ 592,858,223	50%	296,429,112
c.	2008-2009	\$ (3,411,455,871)	25%	(852,863,968)
7.	Preliminary Actuarial Value of Assets, June 30, 2011: (2) - (6)(a) - (6)(b) - (6)(c)		\$	12,000,586,310
8.	Corridor			
a.	120% of Market Value			14,953,627,091
b.	80% of Market Value			9,969,084,727
9.	Actuarial Value of Assets, June 30, 2011		\$	12,000,586,310
10.	Actuarial Value of Assets as a Percent of Market Value: (9) / (2)			96.3%
11.	Actuarial Value of Assets Approximate Annual Rate of Investment Return			(1.2%)

SECTION II - FUNDING

F. Allocation of Assets

	<u>June 30, 2010</u>	<u>June 30, 2011</u>
1. Total Assets Available for Benefit		
a. Market Value of Assets	\$ 10,581,319,413	\$ 12,461,355,909
b. Actuarial Value of Assets	12,357,199,014	12,000,586,310
2. Annuity Savings Accounts	2,780,570,388	2,805,023,137
3. Assets for Retirees, Beneficiaries, and Disabled Members, including ASA Annuities		
a. Retirees, Beneficiaries, and Disabled	\$ 4,220,908,907	\$ 4,569,417,231
b. ASA Annuities	<u>710,683,223</u>	<u>801,369,029</u>
c. Total	\$ 4,931,592,130	\$ 5,370,786,260
4. Total Non-Retired and Non-ASA Assets		
a. Market Value of Assets: (1)(a) - (2) - (3)(c)	\$ 2,869,156,895	\$ 4,285,546,512
b. Actuarial Value of Assets: (1)(b) - (2) - (3)(c)	\$ 4,645,036,496	\$ 3,824,776,913
5. Total Ledger Assets	\$ 3,100,604,632	\$ 4,605,663,347
a. State Amount	\$ 1,203,962,341	\$ 1,726,190,439
b. State Percent	38.8%	37.5%
c. Political Subdivisions Amount	\$ 1,896,642,291	\$ 2,879,472,908
d. Political Subdivisions Percent	61.2%	62.5%
6. State Allocation		
a. Market Value of Assets: (4)(a) x (5)(b)	\$ 1,114,091,367	\$ 1,606,211,496
b. Actuarial Value of Assets: (4)(b) x (5)(b)	\$ 1,803,664,020	\$ 1,433,516,270
7. Political Subdivisions Allocation		
a. Market Value of Assets: (4)(a) x (5)(d)	\$ 1,755,065,528	\$ 2,679,335,016
b. Actuarial Value of Assets: (4)(b) x (5)(d)	\$ 2,841,372,476	\$ 2,391,260,643

SECTION II - FUNDING

G. State – Contribution Rate

	June 30, 2010	June 30, 2011
Development of Annual Required Contribution:		
1. Current Payroll	\$ 1,730,479,696	\$ 1,641,685,770
2. Normal Cost (Beginning of Year)		
a. Amount	\$ 110,142,867	\$ 73,614,164
b. Percentage of Payroll	6.37%	4.49%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations		
a. Amount	\$ 66,147,093	\$ 84,263,994
b. Percentage of Payroll	3.82%	5.13%
4. Annual Required Contribution Rate (True Rate, Before Smoothing): (2)(b) + (3)(b)	10.19%	9.62%
5. Estimated Annual Required Contribution Amount		
a. Fiscal Year Beginning	July 1, 2011	July 1, 2012
b. Anticipated Payroll: (1) x [(1 + 4.0%)]	\$ 1,799,698,884	\$ 1,707,353,201
c. Amount: (4) x (5)(b) ¹	\$ 183,389,316	\$ 164,247,378
Development of Smoothed Rate: ²		
6. Prior Year Actual Rate	7.00%	
7. Difference between True Rate and Prior Year Actual Rate: (4) - (6)	3.19%	
8. If increase, one-half of difference in (7); if decrease, excess of (7) over 1.00%; rounded up the nearest tenth percent	1.60%	
9. Smoothed Rate: [(6) + (8), not less than (6)]	8.60%	
Approved Funding Rate: ³	8.60%	9.70%

¹ Since the State contribution rate becomes effective one year after the valuation date, the Annual Required Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Annual Required Contribution Rate computed at the valuation date.

² At the December 16, 2011 meeting, the Board resolved to discontinue the use of the contribution rate smoothing rules previously in effect, effective with the June 30, 2011 valuation.

³ The Approved Funding Rate for June 30, 2011 valuation year is based on Annual Required Contribution rate, rounded up to the next tenth of a percent.

SECTION II - FUNDING

H. Political Subdivisions – Aggregate Contribution Rate

	June 30, 2010	June 30, 2011
Development of Annual Required Contribution:		
1. Current Payroll	\$ 3,165,532,884	\$ 3,177,087,910
2. Normal Cost (Beginning of Year)		
a. Amount	\$ 210,381,322	\$ 179,392,537
b. Percentage of Payroll	6.65%	5.64%
3. Unfunded Actuarial Accrued Liability (UAAL) Annual Amortizations		
a. Amount	\$ 97,171,196	\$ 138,404,949
b. Percentage of Payroll	3.07%	4.36%
4. Aggregate Annual Required Contribution Rate (True Rate, Before Smoothing): (2)(b) + (3)(b)	9.72%	10.00%
5. Estimated Annual Required Contribution Amount		
a. Fiscal Year Beginning	January 1, 2012	January 1, 2013
b. Anticipated Payroll: (1) x [(1 + 4.0%)] ^{1.5}	\$ 3,357,351,701	\$ 3,369,606,916
c. Amount: (4) x (5)(b) ¹	\$ 326,334,585	\$ 336,960,692
Development of Smoothed Rate:		
6. Aggregate Prior Year Actual Rate	7.88%	
7. Difference between Aggregate True Rate and Aggregate Prior Year Actual Rate: (4) - (6)	1.84%	
8. Smoothed Rate ²	8.82%	
Composite Rate Migration:³		9.73%
Approved Funding Rate:	8.82%	9.73%

¹ Since the Political Subdivision contribution rates becomes effective one and a half years after the valuation date, the Annual Required Contribution Amount is estimated by assuming payroll will increase 4.0% per year and then applying the Aggregate Annual Required Contribution Rate computed at the valuation date.

² Contribution rate smoothing is applied to each individual Political Subdivision. The employer rate shown is the weighted average of those smoothed rates. At the December 16, 2011 meeting, the Board resolved to discontinue the use of the contribution rate smoothing rules previously in effect, effective with the June 30, 2011 valuation.

³ At the December 16, 2011 meeting, the Board adopted a policy to phase in a single contribution rate for all participating political subdivisions, effective with the June 30, 2011 valuation. The Approved Funding Rate for each political subdivision was set equal to the prior year Actual Rate, plus 1.50%, subject to a maximum rate of 10% (i.e. the "composite" rate).

SECTION II - FUNDING

Unfunded Actuarial Accrued Liability Amortization Schedule ¹

I. State

	<u>Date Base Established</u>	<u>Reason</u>	<u>Remaining Unfunded</u>	<u>Remaining Period</u>	<u>Amortization Amount</u>
1.	6/30/2008	Fresh Start	\$ 42,891,143	27	\$ 3,344,136
2.	6/30/2009	Actuarial Experience	271,623,671	28	20,915,512
3.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	550,280,025	29	41,887,445
4.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	240,550,304	30	18,116,901
	Total		\$ 1,105,345,143		\$ 84,263,994

J. Political Subdivisions

	<u>Date Base Established</u>	<u>Reason</u>	<u>Remaining Unfunded</u>	<u>Remaining Period</u>	<u>Amortization Amount</u>
1.	6/30/2006	Fresh Start	\$ 218,499,500	25	\$ 17,522,949
2.	6/30/2007	Actuarial Experience and Changes in Actuarial Assumptions	4,375,426	26	345,786
3.	6/30/2008	Actuarial Experience	45,325,760	27	3,533,958
4.	6/30/2009	Actuarial Experience	332,644,336	28	25,614,213
5.	6/30/2010	Actuarial Experience and Changes in Actuarial Assumptions	658,882,482	29	50,154,290
6.	6/30/2011	Actuarial Experience and Changes in Actuarial Assumptions	547,488,336	30	41,233,753
	Total		\$ 1,807,215,840		\$ 138,404,949

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION II - FUNDING

K. History of Employer Contribution Rates^{1, 2}

1.	2.		3.		4.
Valuation Date	State		Political Subdivisions		Weighted Average
Valuation Date	Effective Date	Contribution Rate	Effective Date	Contribution Rate	Weighted Average
June 30, 2001	July 1, 2002	5.2%	January 1, 2003	5.0%	5.1%
June 30, 2002	July 1, 2003	5.6%	January 1, 2004	6.2%	5.9%
June 30, 2003	July 1, 2004	3.8%	January 1, 2005	4.7%	4.4%
June 30, 2004	July 1, 2005	4.5%	January 1, 2006	5.3%	5.0%
June 30, 2005	July 1, 2006	5.5%	January 1, 2007	6.3%	6.0%
June 30, 2006	July 1, 2007	6.3%	January 1, 2008	6.9%	6.7%
June 30, 2007	July 1, 2008	6.3%	January 1, 2009	6.9%	6.6%
June 30, 2008	July 1, 2009	6.5%	January 1, 2010	7.1%	6.8%
June 30, 2009	July 1, 2010	7.0%	January 1, 2011	7.9%	7.6%
June 30, 2010	July 1, 2011	8.6%	January 1, 2012	8.8%	8.7%
June 30, 2011	July 1, 2012	9.7%	January 1, 2013	9.7%	9.7%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² Prior to the June 30, 2011 valuation date, rates shown reflect application of the contribution rate smoothing rules.

SECTION II - FUNDING

L. Approximate Investment Return for Year Ending June 30, 2011

	<u>Market Value of Assets</u>	<u>Actuarial Value of Assets</u>
1. Balance, beginning of year	\$ 10,581,319,413	\$ 12,357,199,014
2. Balance, end of year	12,461,355,909	12,000,586,310
3. Total increase: (2) - (1)	1,880,036,496	(356,612,704)
4. Contributions and Transfers In	504,123,873	504,123,873
5. Benefit payments and Transfers Out	713,716,597	713,716,597
6. Net additions: (4) - (5)	(209,592,724)	(209,592,724)
7. Net investment increase: (3) - (6)	2,089,629,220	(147,019,980)
8. Average assets: [(1) + (2) - (7)] / 2	10,476,523,051	12,252,402,652
9. Approximate rate of return: (7) / (8) ¹	19.9%	(1.2%)

M. Historical Investment Experience

1. <u>Year Ending June 30</u>	2. <u>Approximate Annual Rate of Investment Return</u>		3.	4. <u>Actuarial Assumed</u>
	<u>Market Basis</u>	<u>Actuarial Basis</u>		<u>Interest Rate</u>
2001	(2.1%)	5.8%		7.25%
2002	(4.9%)	3.1%		7.25%
2003	3.5%	4.2%		7.25%
2004	16.2%	6.3%		7.25%
2005	9.2%	7.0%		7.25%
2006	10.4%	7.9%		7.25%
2007	17.7%	10.4%		7.25%
2008	(8.3%)	5.3%		7.25%
2009	(21.1%)	(0.9%)		7.25%
2010	13.5%	(0.7%)		7.25%
2011	19.9%	(1.2%)		7.00%

¹ Net of expenses.

SECTION III - ACCOUNTING

ACCOUNTING

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SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27

A. Assumptions and Methods Under GASB #25 and #27

Under the Governmental Accounting Standards Board (GASB) Statements No. 25 and No. 27, certain information about the plan is required to be disclosed. The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2011
Actuarial Cost Method	Entry Age Normal (Level Percent of Payroll)
Amortization Method	Level Dollar
Amortization Period	30 Years, Closed
Actuarial Value of Assets	4-Year Smoothed Market Value with 20% Corridor
Actuarial Assumptions:	
Investment Rate of Return	7.0%
Future Salary Increases	3.25% - 4.5% (includes 3.0% wage inflation)
Cost-of-Living Increases	1.0% compounded annually on employer funded pension

B. Membership Data

The plan consisted of the following membership as of June 30, 2011, the date of the latest actuarial valuation:

Retired members, beneficiaries and disabled members receiving benefits:	70,380
Terminated vested plan members entitled to but not yet receiving benefits:	20,933
Terminated non-vested plan members entitled to a refund of ASA balance:	71,806
Active Plan Members:	<u>147,933</u>
Total membership:	311,052

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

C. Total PERF – Statement of Plan Net Assets

1.	Assets		
	a. Cash and Cash Equivalents	\$	1,368,372,786
	b. Securities Lending Collateral		-
	c. Receivables		
	i. Contributions Receivable	\$	99,041,193
	ii. Accrued Investment Income		35,969,426
	iii. Receivables for Investment Securities		448,923,651
	iv. Member Loans		-
	v. Miscellaneous Receivables		844,718
	vi. Due From Other Governmental Plans		737,475
	vii. Due From Other Funds		25,128,245
	viii. Total Receivables	\$	610,644,708
	d. Investments		
	i. Debt Securities	\$	3,089,162,522
	ii. Equity Securities		4,961,968,112
	iii. Mutual Funds		861,548,751
	iv. Other Investments		2,382,625,429
	v. Total Investments	\$	11,295,304,814
	e. Capital Assets		7,425,687
	f. Total Assets: (1)(a) + (1)(b) + (1)(c)(viii) + (1)(d)(v) + (1)(e)	\$	13,281,747,995
2.	Liabilities		
	a. Accounts Payable	\$	15,964,608
	b. Salaries and Benefits Payable		862,252
	c. Investments Payable		802,153,123
	d. Securities Lending Collateral		-
	e. Due To Other Governmental Plans		1,054,138
	f. Due To Other Funds		-
	g. Total Current Liabilities	\$	820,034,121
	h. Compensated Absences - Long Term		357,965
	i. Total Liabilities: (2)(a) + (2)(b) + (2)(c) + (2)(d) + (2)(e) + (2)(f) + (2)(g) + (2)(h)	\$	820,392,086
3.	Net Assets Held in Trust for Pension Benefits: (1)(f) - (2)(i)	\$	12,461,355,909

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

D. Total PERF – Statement of Changes in Plan Net Assets

1.	Net Assets as of June 30, 2010	\$	10,581,319,413
2.	Revenue (Additions)		
	a. Contributions		
	i. Member Contributions	\$	156,027,588
	ii. Employer Contributions		342,778,706
	iii. Other Contributions		-
	iv. Total Contributions	\$	498,806,294
	b. Investment Income/Loss		
	i. Investment Income/Loss	\$	2,179,613,882
	ii. Securities Lending Income		8,583,369
	iii. Securities Lending Expenses		(2,166,344)
	iv. Other Investment Expenses		(73,940,542)
	v. Net Investment Income	\$	2,112,090,365
	c. Other Additions		
	i. Intergovernmental Transfers	\$	5,299,445
	ii. Miscellaneous Income		18,134
	iii. Total Other Additions	\$	5,317,579
	d. Total Revenue (Additions): (2)(a)(iv) + (2)(b)(v) + (2)(c)(iii)	\$	2,616,214,238
3.	Expenses (Deductions)		
	a. Pension and Disability Benefits	\$	638,460,412
	b. Death, Survivor, and Funeral Benefits		-
	c. Distributions of Contributions and Interest		65,178,250
	d. Intergovernmental Transfers		10,077,934
	e. Pensions Relief Distributions		-
	f. Local Unit Withdrawals		-
	g. Administrative Expenses		22,461,146
	h. Total Expenses (Deductions): (3)(a) + (3)(b) + (3)(c) + (3)(d) + (3)(e) + (3)(f) + (3)(g)	\$	736,177,742
4.	Changes in Net Assets Held in Trust for Pension Benefits: (2)(d) - (3)(h)	\$	1,880,036,496
5.	Net Assets as of June 30, 2011: (1) + (4)	\$	12,461,355,909

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

E. Total PERF – Schedule of Funding Progress ¹

(\$ in Thousands)

1. Actuarial Valuation Date June 30	2. Actuarial Value of Assets	3. Actuarial Accrued Liability (AAL)	4. Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	5. Funded Ratio (2) / (3)	6. Current Payroll	7. UAAL as a % of Payroll (4) / (6)
2006	\$ 11,177,971	\$ 11,450,928	\$ 272,957	97.6%	\$ 4,322,180	6.3%
2007	12,220,934	12,439,798	218,864	98.2%	4,385,676	5.0%
2008	12,780,116	13,103,221	323,105	97.5%	4,600,354	7.0%
2009	12,569,336	13,506,280	936,944	93.1%	4,931,423	19.0%
2010	12,357,199	14,506,052	2,148,853	85.2%	4,896,013	43.9%
2011	12,000,586	14,913,147	2,912,561	80.5%	4,818,774	60.4%

F. State – Schedule of Funding Progress ^{1, 2}

(\$ in Thousands)

1. Actuarial Valuation Date June 30	2. Non-Retired Actuarial Value of Assets	3. Non-Retired Actuarial Accrued Liability (AAL)	4. Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	5. Non-Retired AAL Funded Ratio (2) / (3)	6. Current Payroll	7. UAAL as a % of Payroll (4) / (6)
2006	\$ 2,169,619	\$ 2,210,377	\$ 40,757	98.2%	\$ 1,592,207	2.6%
2007	2,350,652	2,335,082	(15,570)	100.7%	1,573,566	(1.0%)
2008	2,469,432	2,513,791	44,360	98.2%	1,661,248	2.7%
2009	2,121,550	2,443,039	321,489	86.8%	1,749,781	18.4%
2010	1,803,664	2,678,031	874,367	67.4%	1,730,480	50.5%
2011	1,433,516	2,538,861	1,105,345	56.5%	1,641,686	67.3%

G. Political Subdivisions – Schedule of Funding Progress ^{1, 2}

(\$ in Thousands)

1. Actuarial Valuation Date June 30	2. Non-Retired Actuarial Value of Assets	3. Non-Retired Actuarial Accrued Liability (AAL)	4. Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	5. Non-Retired AAL Funded Ratio (2) / (3)	6. Current Payroll	7. UAAL as a % of Payroll (4) / (6)
2006			\$ 232,200		\$ 2,729,973	8.5%
2007	\$ 3,155,717	\$ 3,390,151	234,434	93.1%	2,812,110	8.3%
2008	3,388,987	3,667,733	278,745	92.4%	2,939,106	9.5%
2009	3,167,211	3,782,666	615,455	83.7%	3,181,642	19.3%
2010	2,841,372	4,115,859	1,274,487	69.0%	3,165,533	40.3%
2011	2,391,261	4,198,476	1,807,216	57.0%	3,177,088	56.9%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² Excludes assets and actuarial accrued liabilities attributable to member ASA balances and members in pay status.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

H. Total PERF – Schedule of Employer Contributions¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Annual Required Contribution (ARC)	3. Actual Employer Contribution	4. % of ARC <u>(3) / (2)</u>
2006	\$ 248,120	\$ 230,357	92.8%
2007	275,171	260,150	94.5%
2008	291,397	303,877	104.3%
2009	316,059	323,151	102.2%
2010	360,183	331,090	91.9%
2011	483,841	342,779	70.8%

I. State – Schedule of Employer Contributions¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Annual Required Contribution (ARC)	3. Actual Employer Contribution	4. % of ARC <u>(3) / (2)</u>
2006	\$ 87,947	\$ 72,890	82.9%
2007	96,430	89,801	93.1%
2008	99,135	106,867	107.8%
2009	107,981	111,214	103.0%
2010	118,200	111,555	94.4%
2011	176,290	115,232	65.4%

J. Political Subdivisions – Schedule of Employer Contributions¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Annual Required Contribution (ARC)	3. Actual Employer Contribution	4. % of ARC <u>(3) / (2)</u>
2006	\$ 160,173	\$ 157,467	98.3%
2007	178,741	170,349	95.3%
2008	192,262	197,010	102.5%
2009	208,078	211,937	101.9%
2010	241,983	219,535	90.7%
2011	307,552	227,548	74.0%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

K. State – Development of Net Pension Obligation (NPO) ¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Annual Required Contribution (ARC)	3. Interest on NPO at Discount Rate	4. ARC Adjustment (9) / (5)	5. Amortization Factor	6. Net Pension Cost (NPC) (2) + (3) - (4)	7. Actual Employer Contribution	8. Change in NPO (6) - (7)	9. NPO at Beginning of Year	10. NPO at End of Year (8) + (9)
2009	\$ 107,981	\$ (4,389)	\$ (5,002)	12.1037	\$ 108,594	\$ 111,214	\$ (2,620)	\$ (60,541)	\$ (63,161)
2010	118,200	(4,579)	(5,218)	12.1037	118,839	111,555	7,284	(63,161)	(55,877)
2011	176,290	(3,911)	(4,503)	12.4090	176,882	115,232	61,650	(55,877)	5,773

L. Political Subdivisions – Development of Net Pension Obligation (NPO) ¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Annual Required Contribution (ARC)	3. Interest on NPO at Discount Rate	4. ARC Adjustment (10) / (5)	5. Amortization Factor	6. Net Pension Cost (NPC) (2) + (3) - (4)	7. Actual Employer Contribution	8. Adjustment for Withdrawn and Merged Units ² (6) - (7)	9. Change in NPO (6) - (7) + (8)	10. NPO at Beginning of Year	11. NPO at End of Year (9) + (10)
2009	\$ 208,078	\$ (7,971)	\$ (9,084)	12.1037	\$ 209,191	\$ 211,937	\$ 3,268	\$ 522	\$ (109,948)	\$ (109,426)
2010	241,983	(7,933)	(9,041)	12.1037	243,091	219,535	1,440	24,996	(109,426)	(84,430)
2011	307,552	(5,910)	(6,805)	12.4090	308,447	227,547	(321)	80,579	(84,430)	(3,851)

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

² Individual Political Subdivisions can withdraw from the plan or merge with other Political Subdivisions which prevents the NPO from reconciling year over year.

SECTION III - ACCOUNTING

REQUIRED SUPPLEMENTARY INFORMATION UNDER GASB #25 AND #27 (CONTINUED)

M. State – Three-Year Trend Information¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Net Pension Cost (NPC)	3. Actual Employer Contribution	4. % of NPC (3) / (2)
2009	\$ 108,594	\$ 111,214	102.4%
2010	118,839	111,555	93.9%
2011	176,882	115,232	65.1%

N. Political Subdivisions – Three-Year Trend Information¹

(\$ in Thousands)

1. Plan Year Ending June 30	2. Net Pension Cost (NPC)	3. Actual Employer Contribution	4. % of NPC (3) / (2)
2009	\$ 209,191	\$ 211,937	101.3%
2010	243,091	219,535	90.3%
2011	308,447	227,548	73.8%

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION III - ACCOUNTING

O. Solvency Test ¹

Portion of Actuarial Liability Provided by Assets
(\$ in Thousands)

1. As of June 30	2. ASA Balances	3. Retired and Beneficiaries	4. Non-Retired Members (Employer Financed Portion)	5. Total Actuarial Accrued Liabilities	6. Actuarial Value of Assets
2005	\$ 2,382,280 100.0%	\$ 3,301,265 100.0%	\$ 5,174,777 92.5%	\$ 10,858,322 96.4%	\$ 10,471,937
2006	2,515,984 100.0%	3,648,764 100.0%	5,286,181 94.8%	11,450,929 97.6%	11,177,971
2007	2,707,176 100.0%	4,007,389 100.0%	5,725,233 96.2%	12,439,798 98.2%	12,220,934
2008	2,694,331 100.0%	4,227,366 100.0%	6,181,524 94.8%	13,103,221 97.5%	12,780,116
2009	2,669,318 100.0%	4,611,257 100.0%	6,225,705 85.0%	13,506,280 93.1%	12,569,336
2010	2,780,570 100.0%	4,931,592 100.0%	6,793,890 68.4%	14,506,052 85.2%	12,357,199
2011	2,805,023 100.0%	5,370,786 100.0%	6,737,338 56.8%	14,913,147 80.5%	12,000,586

¹ Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION IV - CENSUS DATA

CENSUS DATA

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SECTION IV - CENSUS DATA

A. Reconciliation of Participant Data¹

	Inactive Non-Vested		Inactive Deceased ²	Disabled	Retired	Beneficiary	Total	
	Actives	ASA Balance						Inactive Vested
PwC Total as of June 30, 2010	149,877	88,234	14,759	-	4,481	54,317	8,368	320,036
New Entrants	13,137	-	-	-	-	-	-	13,137
Rehires	1,481	(1,173)	(304)	-	(1)	(3)	-	-
Non-Vested Terminations	(7,429)	7,446	(17)	-	-	-	-	-
Vested Terminations	(1,919)	(5,566)	7,490	-	(5)	-	-	-
Retirements	(3,816)	(46)	(1,052)	-	(19)	4,933	-	-
Disablements	(198)	(19)	(85)	-	332	(30)	-	-
Death with Beneficiary	(44)	(6)	(15)	-	(68)	(489)	622	-
Death - Entitled to ASA and/or Pension Benefits	(155)	(1,319)	(40)	1,517	-	-	(3)	-
Death without Beneficiary	(26)	(3)	(9)	-	(89)	(1,582)	(505)	(2,214)
Refunds	(2,715)	(18,023)	(300)	-	-	-	-	(21,038)
Data Adjustments	(260)	921	207	142	19	14	88	1,131
Total as of June 30, 2011	147,933	70,446	20,634	1,659	4,655	57,155	8,570	311,052

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

² Inactive deceased counts include 299 members with vested benefits.

SECTION IV - CENSUS DATA

B. Census Information¹

	June 30, 2010	June 30, 2011
1. Active		
a. Number		
i. State	48,220	45,912
ii. Political Subdivisions	101,657	102,021
iii. Total	149,877	147,933
b. Average Age	47.5	47.6
c. Average Years of Service	11.2	11.4
d. Covered Payroll of Actives		
i. State	1,730,479,696	1,641,685,770
ii. Political Subdivisions	3,165,532,884	3,177,087,910
iii. Total	\$ 4,896,012,580	\$ 4,818,773,680
2. Inactive - Vested		
a. Number	14,759	20,933
b. Average Age	53.9	52.7
c. Average Years of Service	15.1	11.8
3. Inactive - Non-Vested		
a. Number	88,234	71,806
4. Retiree/Beneficiary/Disabled		
a. Number	67,166	70,380
b. Average Age	72.6	72.5
c. Annual Benefits Payable		
i. Pension	422,825,882	455,230,274
ii. ASA Annuities	75,373,430	84,516,826
iii. Total	\$ 498,199,312	\$ 539,747,100

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

SECTION IV - CENSUS DATA

C. Schedule of Active Member Valuation Data ^{1,2}

1. As of June 30	2. Active Members	3. Annual Payroll (\$ in Thousands)	4. Average Pay (3) / (2)	5. Annual Percent Increase
2005	141,428	\$ 4,318,450	30,535	3.5%
2006	140,563	4,322,180	30,749	0.7%
2007	138,863	4,385,676	31,583	2.7%
2008	140,146	4,600,354	32,825	3.9%
2009	147,792	4,931,423	33,367	1.7%
2010	149,877	4,896,013	32,667	(2.1%)
2011	147,933	4,818,774	32,574	(0.3%)

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

² Valuation results prior to June 30, 2010 were calculated by the prior actuary.

SECTION IV - CENSUS DATA

D. Schedule of Retirees, Beneficiaries, and Disabled Members^{1,2,3}

(\$ in Thousands)

1.	2.	3.	4.	5.	6.	7.	8.	9.
Fiscal Year Ending	Added	Annual Allowances	Removed	Annual Allowances	End of Year ⁴	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
<u>June 30</u>	<u>Number</u>	<u>(\$ in Thousands)</u>	<u>Number</u>	<u>(\$ in Thousands)</u>	<u>Number</u>	<u>(\$ in Thousands)</u>		<u>Allowances</u>
2005	4,499	\$ 35,845	1,732	\$ 8,358	57,121	\$ 354,285	8.8%	\$ 6,202
2006	3,403	29,572	2,241	14,440	58,283	377,611	6.6%	6,479
2007	4,633	42,653	2,584	15,229	60,332	412,745	9.3%	6,841
2008	5,376	43,915	3,284	18,022	62,424	436,749	5.8%	6,996
2009	6,047	55,726	3,372	19,103	65,099	477,553	9.3%	7,336
2010	4,827	39,214	2,760	19,022	67,166	498,199	4.3%	7,417
2011	5,402	56,185	2,188	11,698	70,380	539,747	8.3%	7,669

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

² Valuation results prior to June 30, 2010 were calculated by the prior actuary.

³ Annual Allowances include pension and ASA annuity benefits.

⁴ End of year annual allowances are not equal to the prior end of year annual allowances plus additions and less removals because of reductions for beneficiary benefits, data changes, and cost-of-living increases.

SECTION IV - CENSUS DATA

E. Distribution of Active Members by Age and Service ¹

Attained Age	Distribution of Active Members by Age and Service as of June 30, 2011										
	Under 1 year	1 to 4 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	Over 40 years	Total
<25	1,914	2,181	65	3							4,163
25-29	1,952	6,840	1,988	69							10,849
30-34	1,231	5,111	4,102	1,498	44						11,986
35-39	1,034	4,417	3,697	2,984	964	46	3				13,145
40-44	997	4,699	4,243	3,311	2,369	1,152	92	10	1	1	16,875
45-49	1,218	4,431	4,786	4,175	2,718	2,483	1,330	159	2		21,302
50-54	743	3,907	4,431	4,816	3,426	2,909	2,249	1,892	152	7	24,532
55-59	682	3,052	3,574	4,135	3,382	3,259	1,993	1,864	1,025	74	23,040
60-64	358	2,047	2,569	2,664	2,097	2,210	1,459	1,078	740	284	15,506
65-69	134	653	909	787	609	593	375	280	181	103	4,624
70&Up	142	350	427	391	282	144	67	49	34	25	1,911
Total	10,405	37,688	30,791	24,833	15,891	12,796	7,568	5,332	2,135	494	147,933

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

SECTION IV - CENSUS DATA

F. Distribution of Inactive Vested Members by Age and Service¹

Attained Age	Distribution of Inactive Vested Members by Age and Service as of June 30, 2011							Total
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	
<25			1					1
25-29			6					6
30-34			373	3				376
35-39			1,142	302	14			1,458
40-44			1,434	849	195	9	3	2,490
45-49			1,689	824	474	119	9	3,115
50-54			2,165	1,292	619	304	132	4,512
55-59			2,159	1,407	747	355	180	4,848
60-64			1,987	638	360	152	139	3,276
65-69			331	135	68	33	44	611
70&Up			113	58	31	17	21	240
Total			11,400	5,508	2,508	989	528	20,933

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

SECTION IV - CENSUS DATA

G. Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired ¹

Attained Age	Distribution of Retired Members, Beneficiaries, and Disabled Members by Age and Number of Years Retired as of June 30, 2011							
	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 29 years	Over 30 years	Total
<40	54	43	24	19	8	1	1	150
40-44	57	54	23	20	5	3	1	163
45-49	99	114	95	73	19	3	4	407
50-54	695	244	140	118	33	9	7	1,246
55-59	2,632	958	252	175	67	15	12	4,111
60-64	6,350	2,441	852	237	106	20	20	10,026
65-69	7,113	4,268	1,677	669	129	47	36	13,939
70-74	2,707	5,362	3,341	1,261	456	72	47	13,246
75-79	564	1,883	4,294	2,681	907	281	84	10,694
80-84	180	525	1,206	3,681	1,918	593	265	8,368
85-89	44	139	318	800	2,447	1,155	470	5,373
90&Up	14	32	54	117	404	1,214	822	2,657
Total	20,509	16,063	12,276	9,851	6,499	3,413	1,769	70,380

¹ Headcounts reflect the record counts used in the valuation, which may include duplicate records for members (e.g. member may be a retiree and a beneficiary).

SECTION V - CENSUS DATA

H. Schedule of Benefit Recipients by Type of Benefit Option

Number of Benefit Recipients by Benefit Option as of June 30, 2011

Amount of Monthly Benefit	Five Year Guaranteed Beneficiary Benefit (Option 10)	Benefit with No Guarantee (Option 20)	Joint with Full Survivor Benefits (Option 30)	Joint with Two-Thirds Survivor Benefits (Option 40)	Joint with One-Half Survivor Benefits (Option 50)	Integration with Social Security (Option 61)	Five Year Guaranteed Beneficiary Benefit with ASA Cash Refund (Option 71)	Benefit with No Guarantee (Option 80)	Survivors	Disabled	Total
\$ 1 - 500	11699	7067	5899	630	1444	281	973	0	5,882	3,067	36,942
501 - 1,000	5535	5328	3427	761	1536	173	881	1	2,055	1,225	20,922
1,001 - 1,500	1614	2193	1601	395	752	53	356	0	455	290	7,709
1,501 - 2,000	512	861	608	219	291	37	138	0	109	61	2,836
2,001 - 3,000	242	503	346	156	200	36	110	0	57	12	1,662
over 3,000	39	103	59	31	40	5	21	0	11	0	309
Total	19,641	16,055	11,940	2,192	4,263	585	2,479	1	8,569	4,655	70,380

I. Schedule of Average Benefit Payments as of June 30, 2011¹

	Years of Credited Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30+	
Average Monthly Defined Benefit	\$ 115	\$ 168	\$ 263	\$ 358	\$ 495	\$ 687	\$ 1,120	\$ 542
Average Monthly ASA Annuity	\$ 38	\$ 39	\$ 85	\$ 110	\$ 162	\$ 223	\$ 386	\$ 176
Average Final Average Salary	\$ 26,180	\$ 20,353	\$ 21,487	\$ 24,034	\$ 25,883	\$ 28,617	\$ 35,542	\$ 26,632
Number of Benefit Recipients	425	1,948	12,036	19,007	14,731	10,190	12,043	70,380

¹ For some members average salary at retirement and years of credited service was not available. The average salary for each group excludes these members. Members with credited service information that is missing are counted in the "0-4" group.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

ACTUARIAL ASSUMPTIONS AND METHODS

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SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

The assumptions used in the valuation were selected and approved by the INPRS Board of Trustees. The demographic assumptions are reviewed every five years through a study of actual experience. In this way, the actuary provides guidance to the Board in selecting the assumptions. The actuary and other economic and investment professionals also provide advice to the Board for selecting the economic assumptions. In our opinion, the assumptions are reasonable for purposes of this valuation.

Interest Rate / Investment Return	7.0% (net of administrative and investment expenses)			
Interest on Member ASA Balances	7.0% per year			
Future Salary Increases	Based on 2005-2010 experience. Illustrative rates shown below:			
	Age	Inflation	Productivity, Merit, and Promotion	Total Individual Salary growth
	<31	3.00%	1.50%	4.50%
	31-45	3.00%	1.00%	4.00%
	46-60	3.00%	0.50%	3.50%
	>= 61	3.00%	0.25%	3.25%
Inflation	3.0% per year			
Cost of Living Increases	1.0% per year in retirement			
Mortality (Healthy and Disabled)	2008 IRS Static Mortality projected five (5) years with Scale AA			

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

Disability

Based on 2000 - 2005 experience for males and 1995 - 2000 experience for females. Recent experience has been consistent. Illustrative rates shown below:

Age	Male	Female
20	0.0067%	0.0050%
30	0.0208%	0.0158%
40	0.0646%	0.0496%
50	0.2005%	0.1556%
60	0.6220%	0.4881%
70	0.1000%	0.1000%
80	0.0000%	0.0000%

Termination

Select and ultimate tables based on 2005-2010 experience. Illustrative rates shown below:

State (Male)

Earnings < \$20,000

Age	Service					
	0	1	2	3	4	5+
20	57%	40%	23%	19%	17%	13%
30	56%	34%	21%	17%	15%	11%
40	55%	29%	18%	15%	13%	9%
50	55%	24%	15%	13%	11%	6%
60+	55%	20%	12%	10%	9%	4%

State (Male)

Earnings >= \$20,000

Age	Service					
	0	1	2	3	4	5+
20	43%	26%	13%	10%	9%	7%
30	39%	20%	12%	9%	8%	6%
40	36%	16%	11%	8%	7%	5%
50	36%	14%	9%	7%	7%	4%
60+	37%	13%	8%	6%	6%	3%

State (Female)

Earnings < \$20,000

Age	Service					
	0	1	2	3	4	5+
20	57%	40%	26%	26%	21%	16%
30	54%	36%	23%	23%	19%	14%
40	54%	32%	20%	19%	16%	11%
50	54%	29%	17%	15%	13%	8%
60+	54%	25%	15%	11%	11%	6%

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

Termination (continued)

State (Female)		Service					
Earnings >= \$20,000	Age	0	1	2	3	4	5+
	20	43%	25%	14%	14%	11%	8%
	30	36%	22%	13%	12%	10%	7%
	40	35%	19%	12%	10%	9%	6%
	50	35%	17%	10%	9%	7%	5%
	60+	36%	16%	9%	7%	6%	4%

Political Subdivisions (Male)		Service					
Earnings < \$20,000	Age	0	1	2	3	4	5+
	20	33%	25%	13%	12%	10%	7%
	30	29%	21%	11%	10%	9%	6%
	40	28%	17%	10%	8%	8%	5%
	50	26%	14%	8%	7%	6%	4%
	60+	25%	11%	6%	5%	5%	3%

Political Subdivisions (Male)		Service					
Earnings >= \$20,000	Age	0	1	2	3	4	5+
	20	30%	19%	7%	7%	5%	4%
	30	22%	14%	7%	6%	5%	4%
	40	22%	11%	6%	5%	4%	3%
	50	21%	10%	5%	5%	4%	3%
	60+	20%	9%	4%	4%	3%	2%

Political Subdivisions (Female)		Service					
Earnings < \$20,000	Age	0	1	2	3	4	5+
	20	36%	30%	16%	12%	11%	8%
	30	32%	25%	14%	11%	10%	7%
	40	32%	21%	12%	10%	9%	5%
	50	31%	18%	9%	8%	7%	4%
	60+	30%	14%	7%	6%	5%	3%

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

Termination (continued)

Political Subdivisions (Female)
Earnings >= \$20,000

Age	Service					
	0	1	2	3	4	5+
20	31%	21%	10%	8%	7%	4%
30	24%	16%	9%	7%	6%	4%
40	23%	14%	8%	6%	5%	3%
50	23%	12%	7%	6%	5%	3%
60+	23%	11%	6%	5%	4%	2%

Retirement

Based on PERF experience 2005-2010. Illustrative rates shown below:

Age	Service				
	10	15	20	30	31 +
50	0%	4%	4%	4%	4%
55	0%	7%	7%	12%	7%
60	0%	10%	10%	10%	10%
65	30%	30%	30%	30%	30%
70	25%	25%	25%	25%	25%
75+	100%	100%	100%	100%	100%

Decrement Timing

Decrements are assumed to occur at the beginning of the year.

Spouse/Beneficiary

75% of male members and 60% of female members are assumed to be married and or to have a dependent beneficiary. Male members are assumed to be three (3) years older than their spouses and female members are assumed to be two (2) years younger than their spouses.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions (continued)

ASA Withdrawal For active members who are expected to terminate prior to becoming vested (before 10 years of service), 100% of such members withdraw their ASA balance immediately upon termination. For all other active members, 50% of such members withdraw their ASA balance immediately upon termination and 50% of such members annuitize their ASA balance upon commencement of their employer funded annuity benefit.

For inactive members who are not vested, 100% of such members withdraw their ASA balance immediately. For inactive members who are vested, 50% of such members withdraw their ASA balance immediately and 50% of such members annuitize their ASA balance upon commencement of their employer funded annuity benefit.

The assumptions used to annuitize ASA balances are different than the valuation assumptions and create a small cost to the plan.

Data Assumptions Actives and inactives with no date of birth are assumed to be age 48 and 45, respectively. Spouse gender is assumed to be the opposite gender of the member.

Retirees and disabled members that are not married and do not have a retirement option listed are assumed to elect a 5-year certain and life annuity. Retirees and disabled members that are married and do not have a retirement option listed are assumed to be receiving a 100% joint and survivor annuity. Beneficiaries that do not have a retirement option listed are assumed to receive monthly payments for life.

Changes in Assumptions

For the June 30, 2011 valuation, the Board approved the following assumption changes:

- The future salary increases assumption changed from 4.0% per year to age-based rates ranging from 3.25% - 4.50%.
- The termination assumption rates increased to reflect recent experience and are now based on salary above or below \$20,000.
- The retirement assumption rates decreased slightly to reflect recent experience.
- The marriage assumption changed from 90% of members assumed to be married or to have a dependent beneficiary, to 75% of male members and 60% of female members assumed to be married or to have a dependent beneficiary.
- The age difference assumption changed from males assumed to be three (3) years older than their spouses and female members assumed to be three (3) years younger than their spouses, to male members assumed to be three (3) years older than their spouses and female members assumed to be two (2) years younger than their spouses.
- The ASA withdrawal assumption changed from 100% of inactive members assumed to withdraw their ASA balances immediately, to 100% of inactive non-vested members assumed to withdraw their ASA balances immediately, 50% of inactive vested members assumed to withdraw their ASA balances immediately, and 50% of inactive vested members assumed to annuitize their ASA balances upon commencement of their employer funded annuity benefit.

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

The actuarial methods used in this valuation were selected and approved by the Board. In general, the methods provide orderly funding of all benefits being accrued, as well as unfunded past-service benefit liabilities, over a period of thirty years. However, the smoothing methods employed in determining the Actuarial Value of Assets may accelerate or lengthen the effective funding period, depending on whether gains or losses are experienced. In our opinion, the actuarial methods are reasonable for the purposes of this valuation.

1. Actuarial Cost Method

The actuarial cost method is Entry Age Normal - Level Percent of Payroll.

The normal cost is calculated separately for each active member and is equal to the level percentage of payroll needed as an annual contribution from entry age to retirement age to fund projected benefits. The actuarial accrued liability on any valuation date is the accumulated value of such normal costs from entry age to the valuation date.

Gains and losses occurring from census experience different than assumed, assumption changes, and benefit changes are amortized over a 30-year period with level payments each year. A new gain or loss base is established each year based on the additional gain or loss during that year and that base is amortized over a new 30-year period. The purpose of the method is to give a smooth progression of the costs from year to year and, at the same time, provide for an orderly funding of the unfunded liabilities.

2. Asset Valuation Method

Actuarial Value of Assets is equal to a four-year smoothing of gains and losses on the Market Value of Assets subject to a 20% corridor.

3. Employer Funding Contribution Rate

At the December 16, 2011 meeting, the Board resolved to discontinue the use of the contribution rate smoothing rules previously in effect. Based on the June 30, 2011 valuation results, the contribution rate approved for the State is equal to the True Rate for the State, rounded up to the next tenth of a percent. The Political Subdivision rates are now based on a composite rate migration, whereby the rate for each Political Subdivision is based on an increase of 1.5% over the previous year's Actual Rate, up to a maximum of 10% (i.e. the composite rate).

SECTION V - ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods (continued)

4. Method for Allocation of Actuarial Accrued Liability and Normal Cost

The Actuarial Accrued Liability ("AAL") for members with multiple current and/or historical employers is allocated pro rata to each respective employer based on the service the member accrued at each employer. In the event service at each employer is not included in the data, the AAL is allocated evenly amongst all respective employers.

The Normal Cost for members with multiple current employers is allocated to each respective employer based on the salary the member earned at each employer. In the event salary at each employer is not included in the data, the Normal Cost is allocated evenly amongst all respective current employers.

5. Changes in Actuarial Methods

The employer funding contribution rates for the State and Political Subdivisions have changed from the smoothing rates to the True Rate for the State, rounded up to the next tenth of a percent. For Political Subdivisions, the Board approved to begin migration to a single rate for all employers. For Political Subdivisions contributing less than the Composite Rate (aggregate True Rate equal to 10% for fiscal year 2013) during fiscal year 2012, the contribution rate will increase no more than 1.5%, to a maximum of the Composite Rate during fiscal 2013. For Political Subdivisions contributing more than or equal to the Composite Rate during fiscal year 2012, will contribute the Composite Rate during fiscal 2013.

SECTION VI - SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

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A. Summary of Plan Provisions

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SECTION VI - SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions

The benefit provisions for PERF are set forth in IC 5-10.2 and 5-10.3. A summary of those defined pension benefit provisions is presented below:

Participation All full time employees of the State of Indiana and all full time employees of Political Subdivisions which have adopted the plan become members of PERF upon date of hire.

Eligibility for Defined Pension Benefits

- a. Normal Retirement Earliest of:
 - Age 65 with 10 or more years of creditable service
 - Age 60 with 15 or more years of creditable service
 - Age 55 with sum of age and creditable service equal to 85 or more

- b. Early Retirement Age 50 with 15 or more years of creditable service

- c. Late Retirement Subject to continued employment after normal retirement

- d. Disability Retirement 5 or more years of creditable service and qualified for Social Security disability benefits or federal Civil Service disability benefits

- e. Termination 10 or more years of creditable service and no longer active (i.e. vested inactive)

- f. Pre-Retirement Death 15 or more years of creditable service if death occurs in service. If death occurs after separating from service, age 50 with 15 or more years of creditable service

SECTION VI - SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions (continued)

Amount of Benefits

- a. Normal Retirement The normal retirement benefit is a pension payable for life with 60 months guaranteed and is equal to 1.1% of average monthly earnings¹ multiplied by years of creditable service earned.

- b. Early Retirement The early retirement benefit is the accrued retirement benefit determined as of the early retirement date and payable commencing at the normal retirement date. A member may elect to have the benefit commence prior to normal retirement provided the benefit is reduced by 1/10% for each of the first 60 months and by 5/12% for each of the next 120 months that the benefit commencement date precedes the normal retirement date.

- c. Late Retirement The late retirement benefit is calculated in the same manner as the normal retirement benefit. Creditable service and earnings earned after normal retirement is included in the computation.

- d. Disability Retirement The disability retirement benefit is the accrued retirement benefit determined as of the disability date and payable commencing the month following disability date without reduction for early commencement.

- e. Termination The termination benefit is the accrued retirement benefit determined as of the termination date and payable commencing at age 65. If the member has 15 or more years of creditable service, then the member may elect to receive a reduced early retirement benefit prior to age 65.

- f. Pre-Retirement Death The spouse or dependent beneficiary is entitled to receive the monthly life benefit under the assumption that the member retired on the later of age 50 or the date before the date of death and elected the joint and full survivor option.

¹ Average monthly earnings is the monthly average of earnings during 20 quarters (in groups of 4 consecutive contribution quarters) preceding retirement that produce the highest such average. Earnings include basic salary, the member's 3% mandatory contribution paid by the employer, the member's salary reduction agreement under Section 125, 430(b), or 457 of the Internal Revenue Code, and up to \$2,000 of additional compensation received from the employer in anticipation of the member's termination or retirement.

SECTION VI - SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions (continued)

Member Contributions

Each member is required to contribute to an Annuity Savings Account at the rate of 3% of pay (unless the employer has opted to make the contribution for the employee). These contributions are kept on deposit and credited with interest based on the investment elections of each member until such time as they are refunded or used to provide the annuity benefit at retirement.

The benefits provided by the Annuity Savings Account are in addition to the benefits provided by employer contributions.

Optional Forms of Payment

- a. 5-Year Guaranteed Beneficiary Benefit (Option 10) Member will receive a monthly benefit for the rest of their life. If the member dies before receiving benefits for 5 years, the beneficiary will receive that monthly benefit for the remainder of those 5 years or a lump sum distribution equal to the present value of those payments. After 5 years, there are no payments available to the beneficiary.
- b. Benefit with No Guarantee (Option 20) Member will receive a monthly benefit for life, but there are no monthly payments to anyone after death. However, the balance of the Annuity Savings Account will be distributed to the beneficiary or estate if it is larger than the payments previously made to the member.
- c. Joint with Full Survivor Benefits (Option 30) Member will be paid a monthly benefit for life. After death, the same monthly benefit will be paid to the beneficiary for their lifetime.
- d. Joint with Two-Thirds Survivor Benefits (Option 40) Member will be paid a monthly benefit for life. After death, two-thirds (2/3) of the benefit will be paid to the beneficiary for their lifetime.
- e. Joint with One-Half Survivor Benefits (Option 50) Member will be paid a monthly benefit for life. After death, one-half (1/2) of the benefit will be paid to the beneficiary for their lifetime.

SECTION VI - SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions (continued)

Optional Forms of Payment (Continued)

- f. Integration with Social Security (Option 61) A member who retires between ages 50 and 62 may integrate the PERF monthly pension benefit with the member's estimated Social Security benefits. This does not affect the amount of the benefit received from the Social Security Administration.

Before age 62, the member's benefits will equal the sum of the member's Social Security estimate, multiplied by actuarial factors, and the member's early retirement benefit. This will result in the member receiving a larger monthly benefit payment before age 62. After age 62, the member's benefit will equal the difference between the member's Social Security estimate, multiplied by actuarial factors, and the member's pre-62 monthly pension benefit. Depending upon the member's estimated Social Security disbursement, benefit payments may be greatly reduced or terminated at age 62.

- g. 5-Year Guaranteed Beneficiary Benefit with ASA Cash Refund (Option 71) In order to select this option, the member must choose to combine at least a portion of their ASA with their lifetime monthly pension benefit. If selected, the member will receive a monthly benefit for the rest of their life. If the member dies before receiving payments for 5 years, the beneficiary will receive the pension portion of their monthly benefit for the remainder of those 5 years or a lump sum equal to the present value of those remaining payments. Also, upon death (whether death occurs before or after receiving 5 years of benefits), the beneficiary may receive any remaining balance of the Annuity Savings Account.

Annuity Savings Account ("ASA") Payment Forms

- a. Leave ASA Invested with PERF Members may choose to leave their ASA invested with PERF. According to IRS regulations, the member must begin distribution at age 70 1/2. Until the member elects to receive funds, they will remain invested according to member direction.
- b. Combine ASA with Lifetime Pension Benefit The member may choose to receive, as part of their monthly benefit, the total amount of their ASA. The member will not receive any other distribution from the ASA other than this monthly payment.

SECTION VI - SUMMARY OF PLAN PROVISIONS

A. Summary of Plan Provisions (continued)

Annuity Savings Account ("ASA") Payment Forms (continued)

- c. **Withdraw Entire ASA** The member withdraws their entire ASA by means of either a direct rollover, complete withdrawal, or partial rollover to a qualified plan for the Taxable Portion of their ASA and, if it applicable, one of these choices for the 1986 Tax Basis Portion.

- d. **Withdraw 1986 Tax Basis Portion of ASA and Combine Taxable Portion with Pension Benefit** The member withdraws the non-taxable (1986 Tax Basis) portion of their ASA in the form of a direct rollover, a complete distribution, or a partial rollover to a qualified plan, and then receives the balance of the account as a part of their monthly payment.

Cost-of-Living Adjustments The monthly pension benefits for members in pay status are increased periodically to preserve purchasing power that is diminished due to inflation. Such increases are not guaranteed by Statute and have historically been provided on an "ad hoc" basis.

Changes in Provisions No changes since prior valuation.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

Definitions of Technical Terms

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SECTION VII - DEFINITIONS OF TECHNICAL TERMS

A. Definitions of Technical Terms

Actual Rate	For valuations prior to June 30, 2011, the contribution rate expressed as a percentage of covered payroll on an annual basis (not less than 0.0%) that is the result of applying applicable smoothing rules to the prior year Actual Rate and current year True Rate. For valuations beginning June 30, 2011, the contribution rate does not pertain to the smoothing rules previously applied.
Actuarial Accrued Liability (AAL)	That portion, as determined by a particular Actuarial Cost Method, of the Present Value of Future Benefits (PVFB) and expenses which is not provided for by future Normal Costs. Generally this means the portion of the PVFB attributable to past service.
Actuarial Assumptions	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; changes in compensation and Government provided pension benefits; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; characteristics of future entrants for Open Group Actuarial Cost Methods; and other relevant items.
Actuarial Cost Method	A procedure for determining an actuarially equivalent allocation of the Present Value of Future Benefits to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
Actuarially Equivalent	A method of making the actuarial present value of two series of payments equal as of a given date using the same assumptions.
Actuarial Gain/(Loss)	The difference between actual unfunded Actuarial Accrued Liability and anticipated unfunded Actuarial Accrued Liability — during the period between two valuation dates. It is a measurement of the difference between actual and expected experience.
Actuarial Present Value	The single amount now that is equal to a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

A. Definitions of Technical Terms (continued)

Actuarial Valuation Date	The date as of which an actuarial valuation is performed.
Amortization	The payment of a present value financial obligation on an installment basis over a future number of years.
Annual Required Contribution of the Employer (ARC)	The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the plan provisions, actuarial assumptions, actuarial cost method and other actuarial method prescribed by Governmental Accounting Standards No. 25 and No. 27.
Creditable Service	Service credited under the system that was rendered before the date of the actuarial valuation.
Funding Policy	The program for the amounts and timing of contributions to be made by plan members, employer, and other contributing entities (for example, state government contributions to a local government plan) to provide the benefits specified by a pension plan.
Level Dollar Amortization Method	The amount to be amortized is divided into equal dollar amounts to be paid over a given number of years; part of each payment is interest and part is principal (similar to a mortgage payment on a building). Because payroll can be expected to increase as a result of inflation, level dollar payments generally represent a decreasing percentage of payroll; in dollars adjusted for inflation, the payments can be expected to decrease over time.
Normal Cost (NC)	That portion of the present value of future benefits which is allocated to a valuation year by the Actuarial Cost Method. The normal cost is specific to the cost method used.
Plan Assets	Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.

SECTION VII - DEFINITIONS OF TECHNICAL TERMS

A. Definitions of Technical Terms (continued)

Plan Members	The individuals covered by the terms of a pension plan. The plan membership generally includes employees in active service, terminated employees who have accumulated benefits but are not yet receiving them, and retired employees and beneficiaries currently receiving benefits.
Present Value of Future Benefits (PVFB)	Projected benefits estimated to be payable to plan members (retirees and beneficiaries, terminated employees entitled to benefits but not yet receiving them, and current active members upon retirement) as a result of their service through the valuation date and their expected future service. The actuarial present value of projected future benefits as of the valuation date is the present value of the cost to finance benefits payable in the future, discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment (taking into account mortality, turnover, probability of participating in plan retirement, etc.). Alternatively, it is the amount that would have to be invested on the valuation date so that the amount invested plus investment earnings will provide sufficient assets to pay the projected benefits when due.
True Rate	The precise actuarial contribution rate (not less than 0.0%) determined by summing the Normal Cost and amortization of unfunded Actuarial Accrued Liability and dividing by anticipated payroll.